WHAT IS CLAIMED IS:

[1] An access system operable to access information data, which is dispersedly located in an IP network constructed by connecting communication lines with each other, from an access device through the communication lines, said access system comprising:

a browser section operable to access the address of information data as input, and acquire and browse said information data on said access device side;

a storage section provided in said access device and operable to store the address of said predetermined information data;

a trigger receiving section provided in said access device and operable to receive a trigger signal from said IP network side;

an address replacement section provided in said access device and operable to replace the address of said information data as input with the address of said predetermined information data stored in said storage section on the basis of said trigger signal as received; and

an access section provided in said access device and operable to access the address as designated by said browser section or the address which is used for the replacement by said address replacement section.

[2] An access system operable to access information data, which is dispersedly located in an IP network constructed by connecting communication lines with each other, from an access device through the communication lines, said access system comprising:

a browser section operable to access the address of information data as input, and acquire and browse said information data on said access device side;

a storage section provided in said access device and operable to store the address of said predetermined information data;

an IP connection monitoring section provided in said access device and operable to monitor whether or not it is

possible to connect with said IP network;

an address replacement section provided in said access device and operable to replace the address of said information data as input with the address of said predetermined information stored in said storage section when it is determined impossible to connect with said IP network; and

an access section provided in said access device and operable to access the address as designated by said browser section or the address which is used for the replacement by said address replacement section, wherein

said access section is provided with the functionality of making a dial-up connection through a communication line (hereinafter referred to as "bypass communication line") different than the communication line that is determined not available for connection and serves to access the address used for the replacement through said bypass communication line.

[3] An access system operable to access information data, which is dispersedly located in an IP network constructed by connecting communication lines with each other, from an access device through the communication lines, said access system comprising:

a browser section operable to access the address of information data as input, and acquire and browse said information data on said access device side;

an internal storage section provided in said access device and operable to store and save an internal page which is accessible by said browser;

a storage section provided in said access device and operable to store the address of said internal page;

an IP connection monitoring section provided in said access device and operable to monitor whether or not it is possible to connect with said IP network;

an address replacement section provided in said access device and operable to replace the address of said information data as input with the address of said internal page stored in said storage section when it is determined impossible to connect with said IP network; and

an access section provided in said access device and

operable to access the address as designated by said browser section or the address which is used for the replacement by said address replacement section.

5 [4] The access system as claimed in claim 1 wherein said trigger receiving section receives said trigger signal from a management server which is located on said IP network and provided with the functionality of transmitting said trigger signal, and wherein said trigger signal is transmitted to a
10 predetermined user who is selected.

[5] The access system as claimed in claim 4 wherein said predetermined user who is selected is a user who resides within a predetermined area, and wherein said information data
15 connectable in response to said trigger signal is maintenance information in said area.

[6] The access system as claimed in claim 4 wherein said information data connectable in response to said trigger
20 signal is advertisement information to be delivered to said predetermined user who is selected.

[7] The access system as claimed in claim 1 wherein said browser section is provided with the functionality of
25 combining and outputting broadcast content, which is received through radio waves, and the network content, which is received through said IP network, and wherein said information data connectable in response to said trigger signal is the network content which is combined with said broadcast content.
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[8] The access system as claimed in claim 7 wherein the network content which is combined with said broadcast content is combined by replacing a commercial message included in said broadcast content with it.
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[9] The access system as claimed in claim 7 wherein said broadcast content is received by a receiver which is detachably provided in the device in which said browser section is operated, and wherein said broadcast content is

combined by said browser section.

[10] The access system as claimed in claim 7 wherein said broadcast content is received by an antenna installed alongside a street, and that the signal as received is rebroadcasted for acquisition.

[11] The access system as claimed in claim 1 wherein said information data is uploaded to a backup server which is located on said IP network as a folder service.

[12] The access system as claimed in claim 11 wherein said backup server stores only differences between the data as uploaded and the data already accumulated in said backup server.

[13] The access system as claimed in claim 2 wherein the failure location and failure type are identified on said communication line in accordance with the response status of a signal which is transmitted to said access section, and wherein said predetermined information data is one of different items of information data corresponding to the failure location and failure type which are identified.

[14] The access system as claimed in claim 3 wherein the failure location and failure type are identified on said communication line in accordance with the response status of a signal which is transmitted to said IP network, and wherein said internal page is one of different pages corresponding to the failure location and failure type which are identified.

[15] The access system as claimed in claim 3 further comprising an internal log recording section operable to record log data which is input and output through said internal page, and a log transmitting section operable to transmit said log data to said management server in response to a request from the management server which is located on said IP network.

[16] The access system as claimed in claim 15 wherein said internal page contains a response message to a predetermined inquiry, and wherein said log data is recorded in an interactive format between said inquiry and said response message.

[17] The access system as claimed in claim 3 wherein said internal page provides the functionality of transmitting and receiving the information data between said internal page and the management server provided on said IP network, and wherein said access section is provided with the functionality of accessing the information data in said management server through said bypass communication line.

[18] The access system as claimed in claim 2 or 17 wherein the information data in said management server contains an input section for inputting diagnostic items relevant to the communication by said access system, and wherein said management server is provided with an application running section operable to output a diagnostic message in accordance with the types and combination of the diagnostic items as the information data of said management server.

[19] The access system as claimed in claim 18 wherein said application running section is provided with the request analyzing functionality of determining the setting information of the respective devices on the communication route and the information on the communication environment in accordance with the types and combination of the diagnostic items as input to said input section, and wherein said management server outputs said diagnostic message on the basis of the information acquired in accordance with the determination.

[20] The access system as claimed in claim 19 wherein said application running section is provided with a database for accumulating the address information and authentication information for identifying the user and the device used by this user in association with the local information and communication environment information of the user, and the

functionality of acquiring the address information and authentication information of the accessing user when accessing the information data, and wherein said management server acquires the information about the communication environment peculiar to the user from said database on the basis of the determination made by the request analyzing functionality and the information determined by said address information and authentication information and outputs said diagnostic message on the basis of the information as acquired.

[21] The access system as claimed in claim 19 wherein said application running section is provided with the device setting information acquiring functionality of collecting the setting information of respective devices on the communication route in relation to said diagnostic items, and wherein said device setting information acquiring functionality serves to acquire the setting information of the device, which is relevant, on the basis of the determination of said request analyzing functionality.

[22] The access system as claimed in claim 21 wherein said device on the communication route includes a DSLAM device operable to aggregate and integrate a plurality of communication lines.

[23] The access system as claimed in claim 21 wherein said device on the communication route includes a DHCP device operable to automatically assign, to a terminal device used for communication, the information necessary for connection such as an IP address.

[24] The access system as claimed in claim 21 wherein said device on the communication route includes a router device operable to determine a communication route and relay data between networks when establishing communication.

[25] The access system as claimed in claim 19 further comprising a rule definition file in which a correlation is defined, and a rule updating section operable to update said

rule definition file on the basis of said analysis result.

[26] The access system as claimed in any one of claims 1 through 3 wherein said storage section stores the address of the original information data which is replaced when said address replacement section replaces the address, wherein said address replacement section halts the replacement to the address of the predetermined information data on the basis of a release control signal as received from said IP network side, and wherein said access section accesses the address of the original information data stored in said storage section when said address replacement section halts the replacement to the address.

[27] The access system as claimed in any one of claims 1 through 3 wherein there is an authentication section detachably provided in the device, in which said browser section is operated, and given a unique identifier for accessing said predetermined information data, wherein said address replacement section performs said replacement of the address when it is detected that said authentication section is inserted into said system, and wherein said access section performs authentication by the use of said identifier and accesses said predetermined information data.

[28] An access method of accessing information data, which is dispersedly located in an IP network constructed by connecting communication lines with each other, from an access device through the communication lines, and acquiring and browsing said information data by a browser section on said access device side, said access method comprising:
    a step (1) of receiving a trigger signal from said IP network side in said access device;
    a step (2) of replacing, in said access device, the address of said information data as input through said browser section with the address of said predetermined information data stored in said storage section on the basis of said trigger signal as received; and
    a step (3) of accessing the address of said

predetermined information data used for the replacement, and browsing said predetermined information data.

[29] An access method of accessing information data, which is dispersedly located in an IP network constructed by connecting communication lines with each other, from an access device through the communication lines, and acquiring and browsing said information data by a browser section on said access device side, said access method comprising:

a step (1) of monitoring whether or not it is possible to connect with said IP network;

a step (2) of replacing, in said access device, the address of said information data as input by said browser section with the address of said information data stored in said storage section when it is determined impossible to connect with said IP network in said step (1);

a step (3) of making a dial-up connection through a communication line (hereinafter referred to as "bypass communication line") different than the communication line that is determined impossible to connect, accessing the address of said predetermined information data used for the replacement through said bypass communication line, and browsing said predetermined information data.

[30] An access method of accessing information data, which is dispersedly located in an IP network constructed by connecting communication lines with each other, from an access device through the communication lines, and acquiring and browsing said information data by a browser section on said access device side, said access method comprising:

a step (1) of monitoring whether or not it is possible to connect with said IP network;

a step (2) of replacing, in said access device, the address of said information data as input by said browser section with the address of an internal page stored in said storage section of said access device when it is determined impossible to connect with said IP network in said step (1);

a step (3) of accessing the address of said predetermined information data used for the replacement, and

browsing said predetermined information data.

[31] The access method as claimed in claim 28 wherein in said step (1) said trigger signal is received from a management server which is located on said IP network and provided with the functionality of transmitting said trigger signal, and wherein said trigger signal is transmitted to a predetermined user who is selected.

[32] The access method as claimed in claim 31 wherein said predetermined user who is selected is a user who resides within a predetermined area, and wherein said information data connectable in response to said trigger signal is maintenance information in said area.

[33] The access method as claimed in claim 31 wherein said information data connectable in response to said trigger signal is advertisement information to be delivered to said predetermined user who is selected.

[34] The access method as claimed in claim 28 wherein said browser section is provided with the functionality of combining and outputting broadcast content, which is received through radio waves, and the network content, which is received through said IP network, and wherein said information data connectable in response to said trigger signal is the network content which is combined with said broadcast content.

[35] The access method as claimed in claim 34 wherein the network content which is combined with said broadcast content is combined by replacing a commercial message included in said broadcast content with it.

[36] The access method as claimed in claim 34 wherein said broadcast content is received by a receiver which is detachably provided in the device in which said browser section is operated, and wherein said broadcast content is combined by said browser section.

[37] The access method as claimed in claim 34 wherein said broadcast content is received by an antenna installed alongside a street, and that the signal as received is rebroadcasted for acquisition.

[38] The access method as claimed in claim 28 wherein said information data is uploaded to a backup server which is located on said IP network as a folder service.

[39] The access method as claimed in claim 38 wherein said backup server stores only differences between the data as uploaded and the data already accumulated in said backup server.

[40] The access method as claimed in claim 29 wherein the failure location and failure type are identified on said communication line in accordance with the response status of a signal which is transmitted to said access section, and wherein said predetermined information data is one of different items of information data corresponding to the failure location and failure type which are identified.

[41] The access method as claimed in claim 30 wherein the failure location and failure type are identified on said communication line in accordance with the response status of a signal which is transmitted to said IP network, and wherein said internal page is one of different pages corresponding to the failure location and failure type which are identified.

[42] The access method as claimed in claim 30 further comprising a step of recording log data which is input and output through said internal page, a step of transmitting said log data to said management server in response to a request from the management server which is located on said IP network.

[43] The access method as claimed in claim 42 wherein said internal page contains a response message to a predetermined inquiry, and wherein said log data is recorded in an interactive format between said inquiry and said response

message.

[44] The access method as claimed in claim 30 wherein said internal page is used to transmit and receive the information data between said internal page and the management server provided on said IP network, and wherein said access device is provided with the functionality of accessing the information data in said management server through said bypass communication line.

[45] The access method as claimed in claim 29 or 44 wherein the information data in said management server contains an input section for inputting diagnostic items relevant to the communication by said access method, and wherein said management server is provided with a step of running an application to output a diagnostic message in accordance with the types and combination of the diagnostic items as the information data of said management server.

[46] The access method as claimed in claim 45 wherein said step of running the application includes a request analyzing step of determining the setting information of the respective devices on the communication route and the information on the communication environment in accordance with the types and combination of the diagnostic items as input to said input section, and wherein said management server outputs said diagnostic message on the basis of the information acquired in accordance with the determination.

[47] The access method as claimed in claim 46 wherein a database is used to accumulates the address information and authentication information for identifying the user and the device used by this user in association with the local information and communication environment information of the user, wherein, when accessing the information data, the address information and authentication information of the accessing user is acquired in said step of running the application, and wherein said management server acquires the information about the communication environment peculiar to

the user from said database on the basis of the determination made by the request analyzing functionality and the information determined by said address information and authentication information and outputs said diagnostic message on the basis of the information as acquired.

[48] The access method as claimed in claim 46 wherein the setting information of the device, which is relevant, is acquired, in said step of running the application on the basis of the determination of said request analyzing step.

[49] The access method as claimed in claim 48 wherein said device on the communication route includes a DSLAM device operable to aggregate and integrate a plurality of communication lines.

[50] The access method as claimed in claim 48 wherein said device on the communication route includes a DHCP device operable to automatically assign, to a terminal device used for communication, the information necessary for connection such as an IP address.

[51] The access method as claimed in claim 48 wherein said device on the communication route includes a router device operable to determine a communication route and relay data between networks when establishing communication.

[52] The access method as claimed in claim 46 further comprising a step of describing a rule which defines the correlation in a rule definition file, and updating said rule definition file on the basis of said analysis result.

[53] The access method as claimed in any one of claims 28 through 30 wherein the address of the original information data which is replaced is stored in said step (2), and wherein the address of the original information data as stored is accessed when halting the replacement to the address of the predetermined information data on the basis of a release control signal as received from said IP network side.

[54] The access method as claimed in any one of claims 28 through 30 wherein a unique identifier for accessing said predetermined information data is assigned to an authentication section detachably provided in a communication device, wherein said address replacement is performed in said step (2) when it is detected that said authentication section is inserted into said system, and wherein authentication is performed by the use of said identifier followed by accessing said predetermined information data in said step (3).